Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

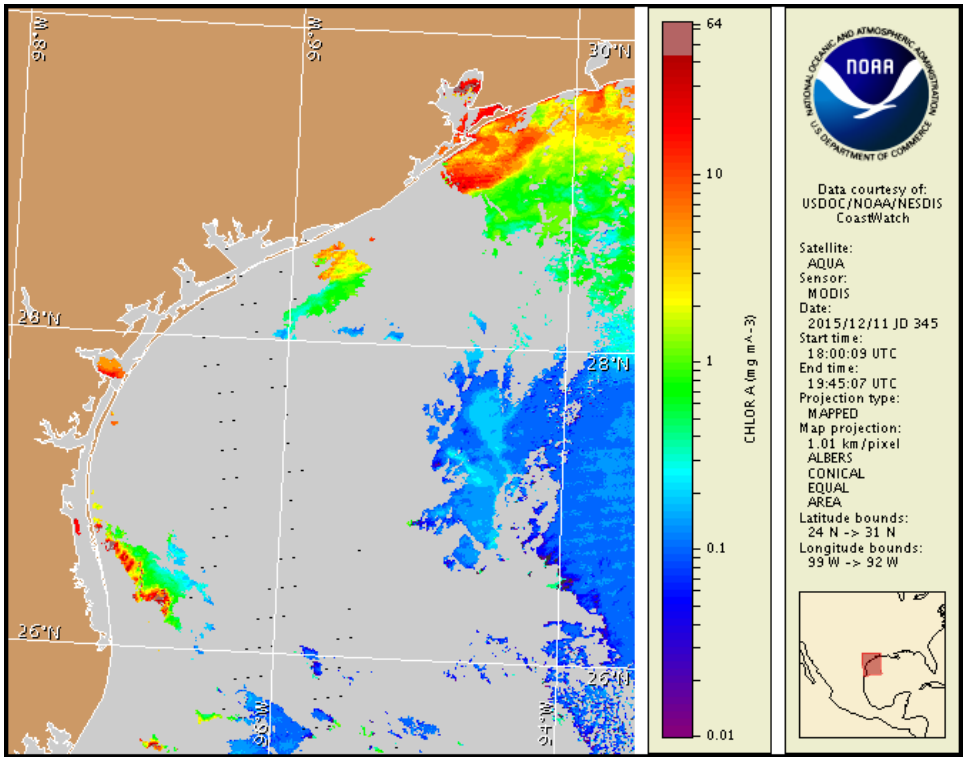
Monday, 14 December 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, December 7, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 4 to 10: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

---

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to 'very low a' concentrations along the coast of Texas. No respiratory irritation is expected Monday, December 14 through Monday, December 21.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

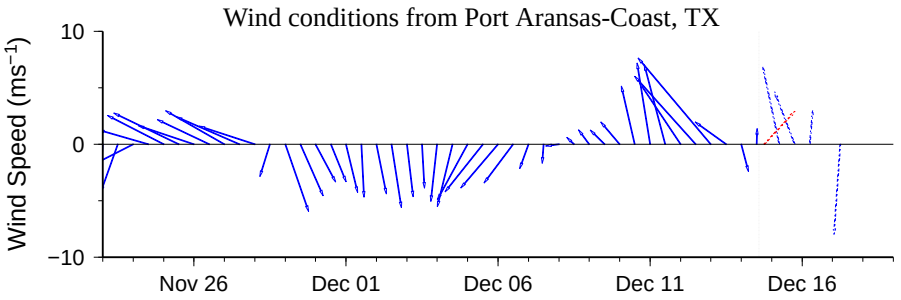
Analysis

Sampling from the Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates that *Karenia brevis* concentrations range between 'not present' and 'very low a' (TAMU; 12/7-11). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (12/11, shown left) is obscured by clouds along-and offshore the Texas coast from the Galveston Island region to south of the Rio Grande, limiting analysis. Patches of elevated to very high chlorophyll (2 to >20 μg/L) are visible along- and offshore the Texas coast from Sabine Pass to Galveston Island. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 10 km north from the Port Aransas region from December 11 to 17.

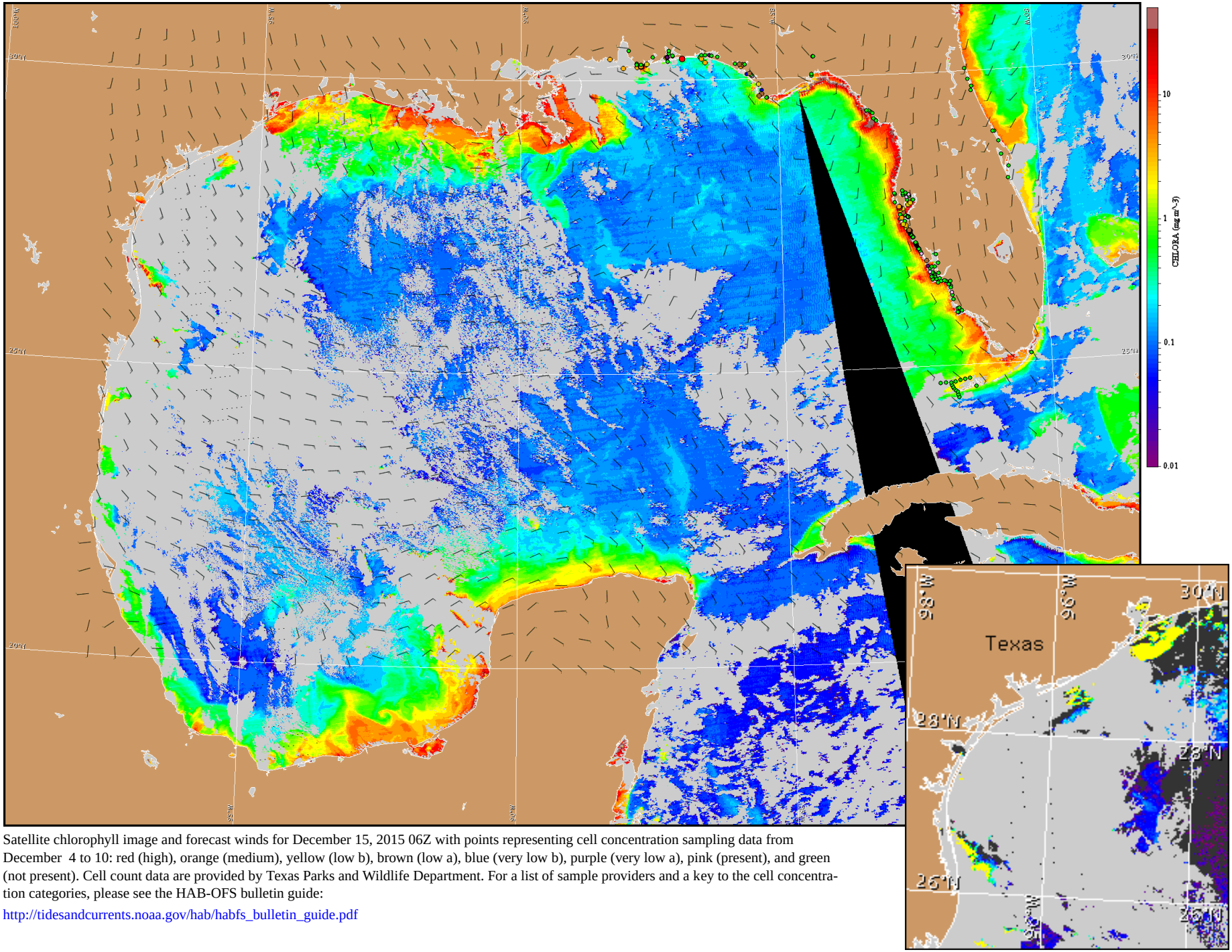
Davis, Kavanaugh



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas to Baffin Bay: Southwest to south winds (5-15kn, 3-8m/s) today. Southeast winds (10-15kn, 5-8m/s) Tuesday. South winds (10kn, 5m/s) Tuesday night shifting southwest after midnight. North winds (5-20kn, 3-10m/s) Wednesday through Friday becoming east winds (5-10kn, 3-5m/s) Friday night.



Satellite chlorophyll image and forecast winds for December 15, 2015 06Z with points representing cell concentration sampling data from December 4 to 10: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).